

# AKAI SERVICE MANUAL

## STEREO GRAPHIC EQUALIZER

### EA-G30 MODEL EA-G90

THIS MANUAL IS ALSO APPLICABLE TO BOTH SILVER AND BLACK PANEL MODELS

## I. SPECIFICATIONS

### 1. MODEL EA-G30

CENTER FREQUENCY	100 Hz/330 Hz/1 kHz/3.3 kHz/10 kHz
FREQUENCY CONTROL RANGE	±12 dB
RATED OUTPUT LEVEL	1 V
GAIN (FLAT POSITION)	0 dB
INPUT IMPEDANCE	47 kohms
OUTPUT IMPEDANCE	500 ohms
T.H.D. (FLAT POSITION)	0.02%
FREQUENCY RESPONSE	20 Hz to 50 kHz ±1 dB
S/N (IHF-A) (FLAT POSITION/ROUNDING INPUT)	95 dB
MAX. INPUT VOLTAGE	7 V
CHANNEL CROSSTALK (1 kHz, GROUNDING INPUT)	70 dB
POWER REQUIREMENT	100V, 50/60 Hz for Japan 120V, 60 Hz for USA and Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK and Australia 110V-120V/220V-240V, 50/60 Hz switchable for other countries.
DIMENSIONS	440 x 80 x 225 mm (17.3 x 3.1 x 4.4 inches)
WEIGHT	3.2 kg (7.0 lbs)

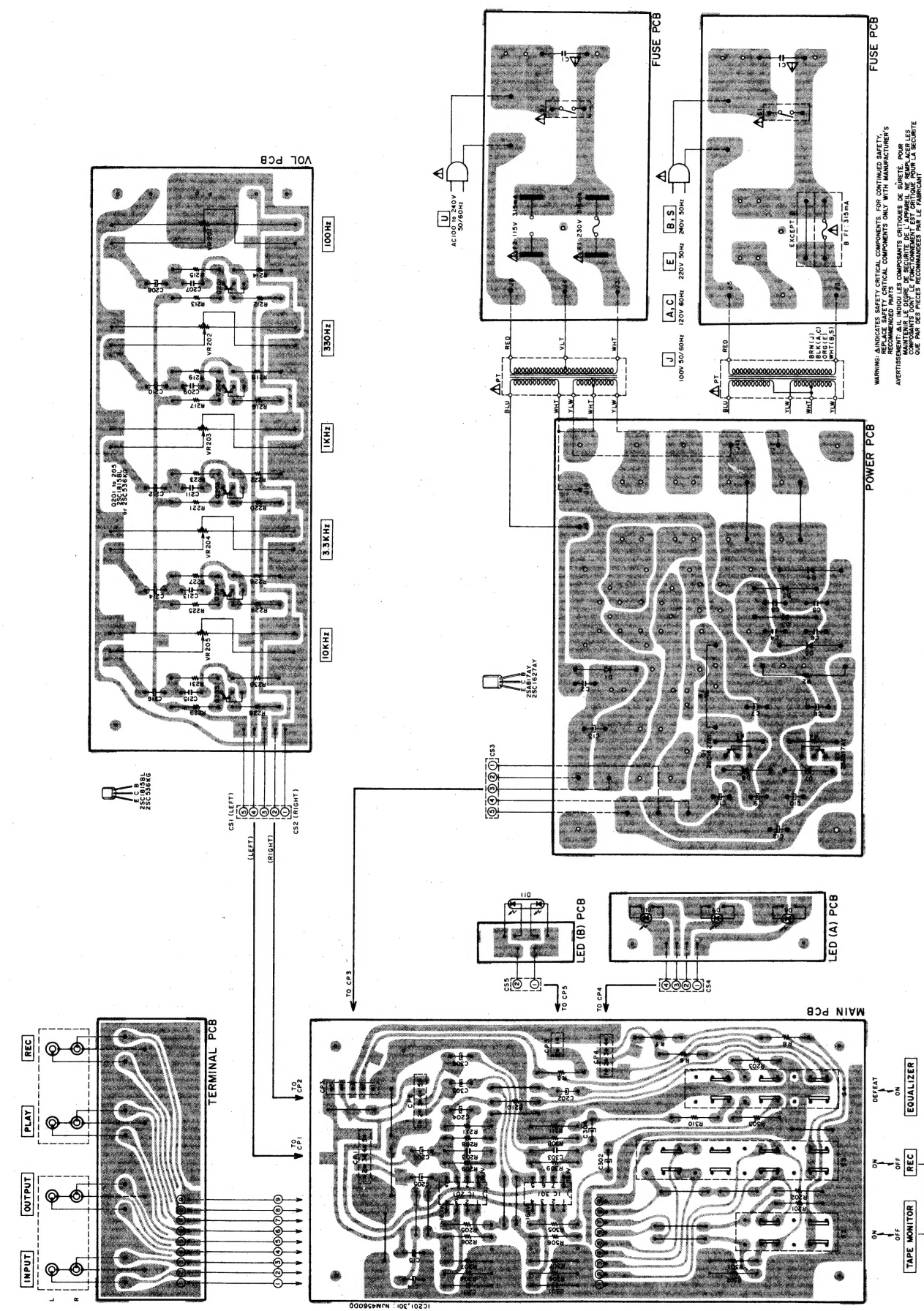
### 2. MODEL EA-G90

CENTER FREQUENCY	16 Hz/31.5 Hz/63 Hz/125 Hz/250 Hz/500 Hz/ 1 kHz/2 kHz/4 kHz/8 kHz/16 kHz/32 kHz
FREQUENCY CONTROL RANGE	±12 dB/± 6 dB (switchable)
RATED OUTPUT LEVEL	1 V
GAIN (FLAT POSITION)	0 dB
INPUT IMPEDANCE	47 kohms
OUTPUT IMPEDANCE	330 ohms
T.H.D. (FLAT POSITION)	0.005%
FREQUENCY RESPONSE	10 Hz to 20 kHz ±0.5 dB 20 kHz to 100 kHz ±1.5 dB
S/N (IHF-A) (FLAT POSITION/ROUNDING INPUT)	105 dB
MAX. INPUT VOLTAGE	8 V
CHANNEL CROSSTALK (1 kHz, GROUNDING INPUT)	70 dB
POWER REQUIREMENT	100V, 50/60 Hz for Japan 120V, 60 Hz for USA and Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK and Australia 110V/120V/220-240V, 50/60 Hz internally switchable for other countries.
DIMENSIONS	440 x 120 x 303 mm (17.3 x 4.7 x 11.9 inches)
WEIGHT	3.5 kg (7.7 lbs)

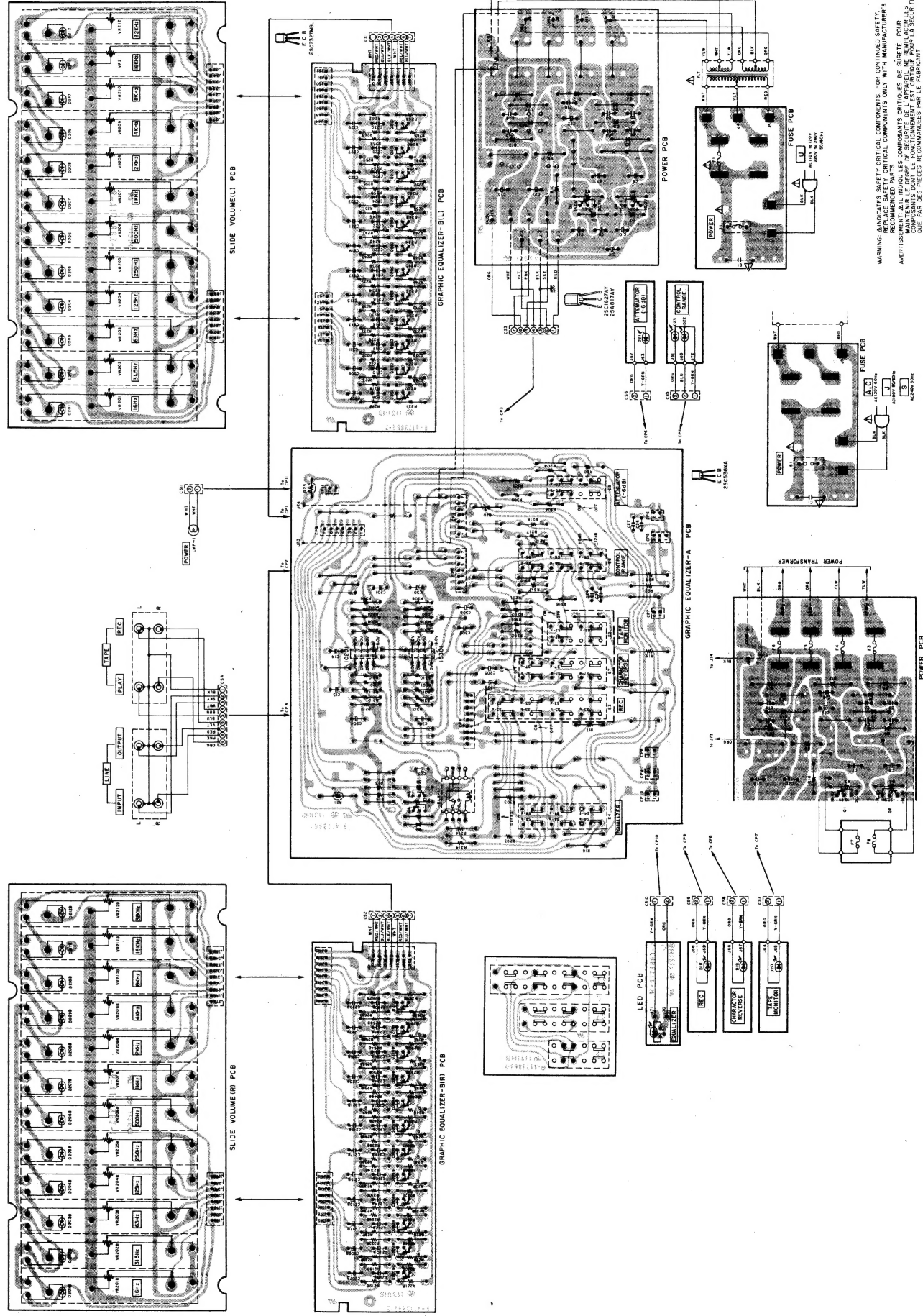
\* For improvement purposes, specifications and design are subject to change without notice.

II. COMPOSITION OF VARIOUS P.C BOARDS

1. MODEL EA-G30

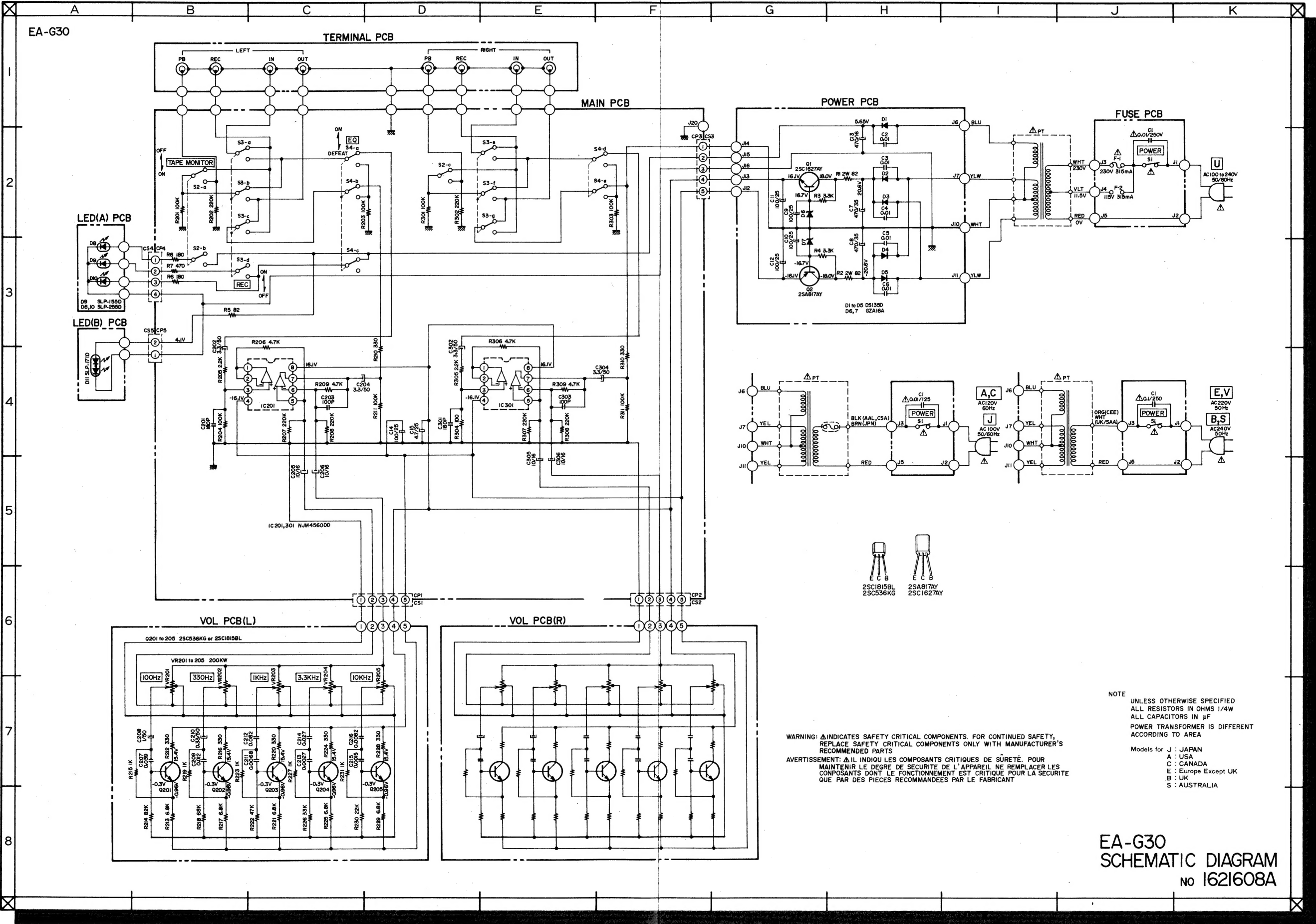


2. MODEL EA-G90



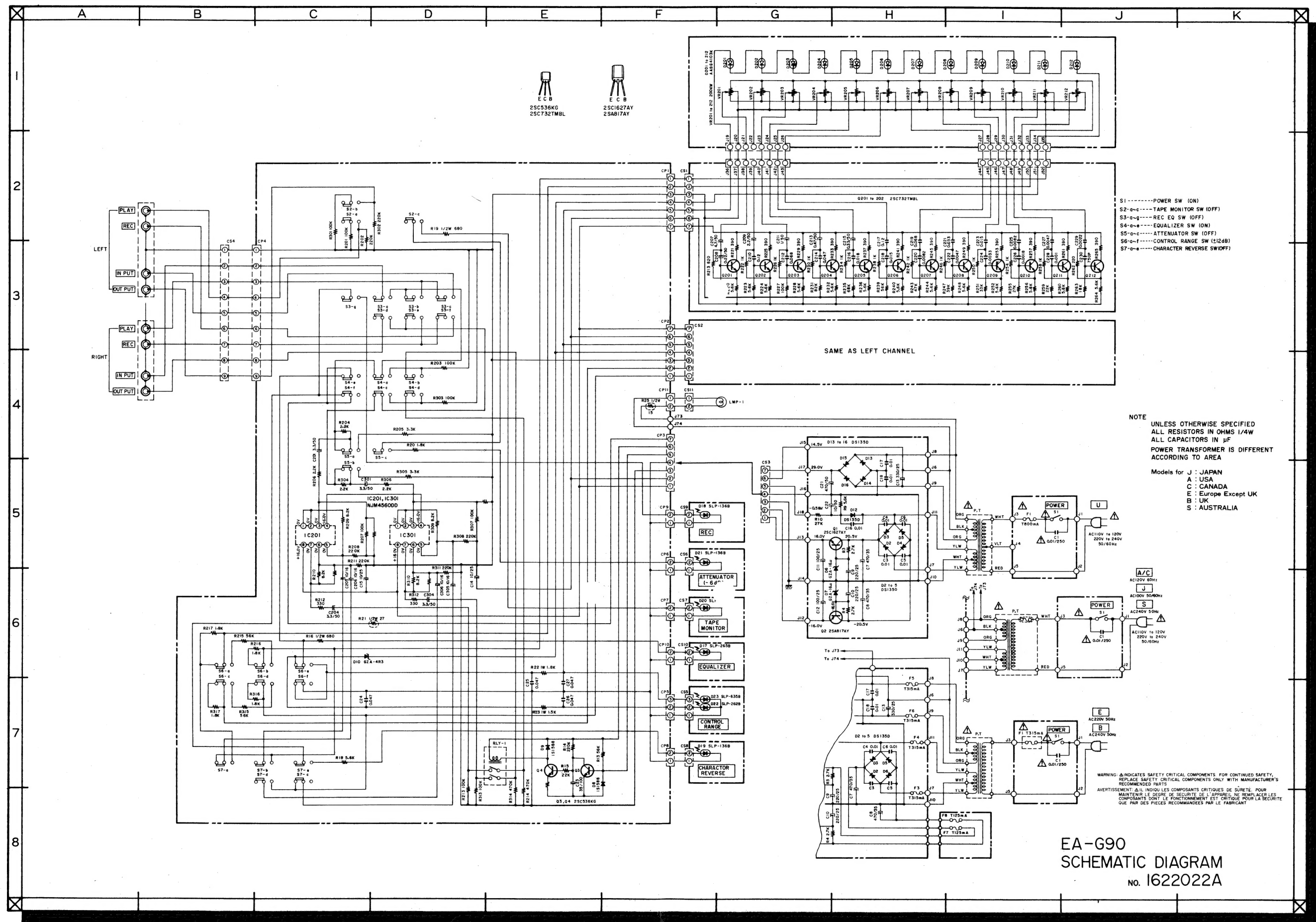
III. SCHEMATIC DIAGRAM

1. MODEL EA-G30





## 2. MODEL EA-G90



## IV. PARTS LIST

Register and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

### 1.MODEL EA-G30

#### 1) MAIN P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
1-1	BA706218	PC MAIN BLK EA-G30
1-IC201	EI706220	IC MJM4560DD
1-IC301	EI706220	IC MJM4560DD
1-S2-4	ES706219	SW PUSH

#### 2) VOLUME P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
2-1	BA706221	PC VR BLK EA-G30
2-Q201to205	ET330225	TR 2SC1815 BL
2-VR201to205	EV706222	VR SLIDE W204

#### 3) POWER P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
3-Q1	ET706214	TR 2SC1627AY
3-Q2	ET706215	TR 2SA817AY
3-D1to5	ED706216	D SILICON DS135D
3-D6,7	ED324936	D ZENER H 05Z16 Z
3-R1,2	ER382173	R OMF H 2W 820K

#### 4) FUSE P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
4-S1	ES706213	△ SW PUSH (U,E,B,S,V)
4-S1	ES706305	△ SW PUSH (J)
4-S1	ES706306	△ SW PUSH (C,A)
4-F1,2	EF706437	△ FUSE T315MA (U)
4-F1	EF706417	△ FUSE T160MA (B)
4-C1	EC320548	△ C CE V F 103Z 250AC (U)
4-C1	EC706419	△ C CE 103 125AC (J)
4-C1	EC706422	△ C CE 103 250AC (C,A)
4-C1	EC706416	△ C CE 103 250AC (E,B,S,V)

#### 5) FINAL ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
5-1	ED322773	D LED SLP-255D-01 GRN (D8,10)
5-2	ED322772	D LED SLP-155D-01 RED (D9)
5-3	ED322243	D LED SLP-171D RED (D11)
5-4	EI706212	TERMINAL PLATE 4P
5-5	BT706211	△ TRANS POWER EA-G30 (U)
5-6	BT706308	△ TRANS POWER EA-G30 (J)
5-7	BT706309	△ TRANS POWER EA-G30 (C)
5-8	BT706310	△ TRANS POWER EA-G30 (A)
5-9	BT706311	△ TRANS POWER EA-G30 (E,V)
5-10	BT706312	△ TRANS POWER EA-G30 (B)
5-11	BT706313	△ TRANS POWER EA-G30 (S)
5-12	BD706199	PANEL FRONT BLK EA-G30
5-13	BD706198	PANEL FRONT BLK EA-G30-BL
5-14	BD706197	PANEL FRONT BLK EA-G30-S
5-15	SK327134	KNOB (B) (VOLUME)
5-16	SK327135	KNOB (B-BL) (VOLUME)
5-17	SK706202	KNOB (A) (POWER)
5-18	SK706203	KNOB (A-BL) (POWER)
5-19	SK706204	KNOB (B) (FUNCTION)
5-20	SK706205	KNOB (B-BL) (FUNCTION)
5-21	ML706207	LEVER SW (FOR POWER SW)
5-22	SP706200	UPPER CASE
5-23	SP706201	UPPER CASE (BL)
5-24	SP706209	PANEL REAR EA-G30 (U)
5-25	SP706314	PANEL REAR EA-G30 (J)
5-26	SP706315	PANEL REAR EA-G30 (C,A)
5-27	SP706316	PANEL REAR EA-G30 (E,V)
5-28	SP706317	PANEL REAR EA-G30 (B,S)
5-29	SA706208	FOOT
5-30	EZ706210	STRAIN RELIEF 2P-4 (U,J,C,A)
5-31	EZ706319	STRAIN RELIEF (E,B,S,V)
5-32	EW306428	△ AC CORD CORES KP-205A, VFF UCJ (U)
5-33	EW706418	△ AC CORD (J)
5-34	EW706420	△ AC CORD (C,A)
5-35	EW706423	△ AC CORD (E)
5-36	EW706415	△ AC CORD (B)
5-37	EW706424	△ AC CORD (S)

### 2.MODEL EA-G90

#### 1) MAIN P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
1-1	BA705569	PC MAIN BLK EA-G90
1-IC201	EI706220	IC MJM4560DD
1-IC301	EI706220	IC MJM4560DD
1-Q3,4	ET316643	TR 2SC536K-NP F,G
1-D8,9	ED557447	D SILICON H 1S1588
1-D10	ED705567	D ZENER GZA4R3
1-S2-7	ES705568	SW PUSH
1-RLY1	EP705580	RELAY
1-R21	ER705583	△ R FUSE 1/2W 270J
1-R22	ER327172	R OMF H SNP FS 1W 182J
1-R23	ER313515	R OMF H SNP FS 1W 152J
1-R25	ER705584	△ R FUSE 1/2W 150J

#### 2) VOLUME P.C BOARD BLOCK

2-1	BA705570	PC VR BLK EA-G90
2-D201to212	ED705585	D LED AABG4103K
2-VR201to212	EV705571	VR SLIDE W/LED

#### 3) B.P.F P.C BOARD BLOCK

3-1	BA705572	PC BPF BLK EA-G90
3-Q201to212	ET705586	TR 2SC732TMBL
3-C230	EC306420	C STY V F05 500 751J 50DC

#### 4) POWER P.C BOARD BLOCK

4-1	BA705574	PC POWER BLK EA-G90(U)
4-Q1	ET706214	TR 2SC1627AY
4-Q2	ET706215	TR 2SA817AY
4-D2to5	ED706216	D SILICON DS135D
4-D6,7	ED705590	D ZENER GZA16U
4-D12to16	ED706216	D SILICON DS135D
4-F3,4	EF706436	△ FUSE T250MA (E,B)
4-F5,6	EF706437	△ FUSE T315MA (E,B)
4-F3to6	EF706437	△ FUSE T315MA (V)
4-F7,8	EF706438	△ FUSE T125MA (E,B,V)

#### 5) FUSE P.C BOARD BLOCK

5-S1	ES706213	△ SW PUSH (U,E,B,S,V)
5-S1	ES706305	△ SW PUSH (J)
5-S1	ES706306	△ SW PUSH (C,A)
5-F1	EF705573	△ FUSE (U)
5-F1	EF706437	△ FUSE T315MA (B)
5-C1	EC320548	△ C CE V F 103Z 250AC (U)
5-C1	EC706419	△ C CE 103 125AC (J)
5-C1	EC706422	△ C CE 103 250AC (C,A)
5-C1	EC706416	△ C CE 103 250AC (E,B,S,V)

#### 6) FINAL ASSEMBLY BLOCK

6-1	ED705561	D LED SLP-265B (D17)
6-2	ED705562	D LED SLP-136B (D18,19)
6-3	ED705563	D LED SLP-236B (D20)
6-4	ED705562	D LED SLP-136B (D21)
6-5	ED705564	D LED SLP-262B (D22)
6-6	ED705566	D LED SLP-635B (D23)
6-7	EJ705560	TERMINAL PLATE 4P EA-G90
6-8	EJ705592	TERMINAL
6-9	EL705591	LAMP
6-10	BT705558	△ TRANS POWER EA-G90 (U)
6-11	BT706434	△ TRANS POWER EA-G90(J)
6-12	BT706431	△ TRANS POWER EA-G90 (C)
6-13	BT706430	△ TRANS POWER EA-G90 (A)
6-14	BT706433	△ TRANS POWER EA-G90 (E,V)
6-15	BT707023	△ TRANS POWER EA-G90 (B)
6-16	BT707024	△ TRANS POWER EA-G90 (S)
6-17	BC705546	UPPER CASE
6-18	BC705547	UPPER CASE (BL)
6-19	BD705548	PANEL BLK EA-G90
6-20	BD705549	PANEL BLK EA-G90-BL
6-21	SK705551	KNOB BLK EA-G90 (EQ)
6-22	SK705552	KNOB BLK EA-G90-BL (EQ)
6-23	ZG705577	SP KNOB (A)
6-24	SK705553	KNOB (B) (POWER)
6-25	ZG705578	SP KNOB (B)
6-26	SK705555	KNOB (A) (VOLUME)
6-27	SA706208	FOOT
6-28	SK705557	KNOB (C) (FUNCTION)
6-29	ML706425	LEVER KNOB (B) (FOR FUNCTION)
6-30	ML705579	LEVER KNOB (FOR EQ)
6-31	ML706207	LEVER SW (FOR POWER)
6-32	SP705559	PANEL REAR EA-G90 (U)
6-33	SP706429	PANEL REAR EA-G90 (J)
6-34	SP706426	PANEL REAR EA-G90 (C,A)
6-35	SP706428	PANEL REAR EA-G90 (E,V)
6-36	SP706427	PANEL REAR EA-G90 (B,S)
6-37	EZ706210	STRAIN RELIEF 2P-4 (U,J,C,A)
6-38	EZ706319	STRAIN RELIEF (E,B,S,V)
6-39	EW306428	△ AC CORD 2 CORES KP-205A, VFF UCJ (U,S)
6-40	EW706418	△ AC CORD (J)
6-41	EW706420	△ AC CORD (C,A)
6-42	EW706423	△ AC CORD (E,V)
6-43	EW706415	△ AC CORD (B)